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WHAT IS CLAIMED IS:

1. An oxide superconductor thick film containing Bi, Pb, Sr, Ca, and Cu and substantially having a composition of (Bi, Pb)_{2+a}Sr₂Ca₂Cu₃O₂ (Note: 0 < a < 0.5) to be formed on a surface of a substrate or a base, wherein

no fracture surface exists in the vicinity of an interface between said substrate or said base and said oxide superconductor thick film in said oxide superconductor thick film.

2. A method for manufacturing an oxide superconductor thick film in such a manner that an oxide superconductor thick film containing Bi, Pb, Sr, Ca and Cu is formed on a surface of a substrate or a base, comprising,

forming a first thick film substantially having a composition of $Bi_2Sr_2Ca_1Cu_2O_z$ on the surface of said substrate or said base, and thereafter, forming an oxide superconductor thick film substantially having a composition of (Bi, Pb)_{2+a}Sr₂Ca₂Cu₃O_z (Note: 0 < a < 0.5) on said first thick film.